



Montague Dixon
US Regulatory Portfolio Lead,
Herbicides
Regulatory and Stewardship NA
(336) 632-7055 (phone)
(336) 632-5688 (fax)
(336) 686-3586 (mobile)
monty.dixon@syngenta.com

Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, NC 27419-8300
www.syngenta.com

EPA PSP

August 12, 2020

Document Processing Desk **(RD) (AMEND)**
Office of Pesticide Programs **(7505P)**
U.S. Environmental Protection Agency
One Potomac Yard, Room S-4900
2777 South Crystal Drive
Arlington, VA 22202

ATTN: Mindy Ondish, Product Manager 23, Herbicide Branch, Registration Division
CC: Dan Kenny, Branch Chief, Herbicide Branch, Registration Division
Sarah Meadows, Herbicide Branch, Registration Division

SUBJECT: A21472 Plus VaporGrip® Technology - EPA Reg. No. 100-1623 (Alternate Brand name: Tavium® Plus VaporGrip® Technology) PRIA R350 Action: Amend Conventional Registration - Change Product Label
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Dear Ms. Ondish,

Syngenta Crop Protection LLC, is submitting a label amendment to A21472 Plus VaporGrip® Technology (EPA Reg. No. 100-1623). This product, herein referred to as "Tavium", is marketed under the alternate brand name Tavium® Plus VaporGrip® Technology. The purpose of this label amendment is to change the directions for use removing the December 20, 2020 automatic expiration and subsequent prohibition of use after this date.

The ability to utilize dicamba containing products approved for over-the-top (OTT) use in dicamba tolerant (DT) crops remains of paramount importance due to widespread populations of broadleaf weeds - including Palmer Amaranth, Tall Waterhemp, and Giant Ragweed - that are resistant to glyphosate and other herbicides including PPO-, ALS- and EPSP- inhibiting herbicides. At the present time, as well as for the foreseeable future, cotton and soybean growers have limited options to protect their crops against these herbicide resistant weed species. The continuing ability to use Tavium which is specifically designed for use in DT crops, provides growers a needed solution by providing both preemergence and postemergence control of broadleaf weeds including herbicide resistant biotypes. Effective management of difficult to control weeds is of critical importance to protect cotton and soybean yield. Accordingly, Syngenta respectfully requests that registration of Tavium be renewed prior to the December 20, 2020 automatic expiration date.

Syngenta understands that the Agency is evaluating data submitted in support of the reregistration of dicamba on these DT crops by Syngenta as well as the other registrants who previously held OTT registrations. Please find included a courtesy copy of our January 15, 2020 submission letter identifying the studies we submitted as required by the Conditions of Registration for Tavium. Syngenta has also made subsequent data submissions as requested by the Agency on March 27 and April 10, 2020. We anticipate that as an outcome of this



review, the Agency may seek additional label modifications in support of a decision to reregister products for OTT use in DT crops. Syngenta welcomes the opportunity to address any questions the Agency may have during this data review and to engage in consideration of potential next steps with respect to potential label modifications if deemed appropriate by the Agency. To that end, we will be requesting a meeting with the Agency to discuss other potential requirements the Agency believes would be beneficial to incorporate consistently across dicamba OTT labels for DT cotton and soybeans.

Please find enclosed with this application a confidential appendix that provides additional information for the Agency's consideration with this action.

The following documentation has been enclosed in support of this amendment.

- Cover Letter
- Completed Application for Pesticide Registration (Form 8570-1) for this action
- PRIA Receipt
- Clean and Highlighted versions of the revised label for A21472 Plus VaporGrip® Technology (EPA Reg. No. 100-1623)
- Courtesy Copy of January 15, 2020 Letter - Subject: Tavium® (A21472) Plus VaporGrip® Technology (EPA Reg. No. 100-1623) Submission of 2019 Annual Report and Studies Supporting Conditions of Registration

PRIA Fee for Service

Based upon discussion with the Agency, this request falls into PRIA category R350 and as such, the required PRIA fee of \$13,888 has been paid per the Pesticide Registration Improvement Renewal Act (PRIA IV) of 2019.



Please contact me by email (monty.dixon@syngenta.com) or call me 336-632-7055 if you have any questions regarding this submission.

Sincerely,

A handwritten signature in black ink, appearing to read "Montague Dixon". The signature is fluid and cursive, with the first name "Montague" written in a larger, more prominent script than the last name "Dixon".

Montague Dixon
US Regulatory Portfolio Lead, Herbicides
Regulatory and Stewardship North America

Enclosure

 United States Environmental Protection Agency Washington, DC 20460		<input type="checkbox"/> Registration <input checked="" type="checkbox"/> Amendment <input type="checkbox"/> Other	OPP Identifier Number
Application for Pesticide - Section I			
1. Company/Product Number 100-1623		2. EPA Product Manager Mindy Ondish	
4. Company/Product (Name) A21472 Plus VaporGrip™ Technology		3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted	
5. Name and Address of Applicant (Include ZIP Code) Syngenta Crop Protection, LLC P. O. Box 18300 Greensboro, NC 27419 <input type="checkbox"/> Check if this is a new address		6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	
Section – II			
<input checked="" type="checkbox"/> Amendment - Explain below. <input type="checkbox"/> Final printed labels in response to Agency letter dated _____ <input type="checkbox"/> Resubmission in response to Agency letter dated _____ <input type="checkbox"/> "Me Too" Application. _____ <input type="checkbox"/> Notification - Explain below. <input type="checkbox"/> Other - Explain below. _____			
Explanation: Syngenta Crop Protection LLC, is submitting a label amendment to A21472 Plus VaporGrip® Technology (EPA Reg. No. 100-1623). This product, herein referred to as "Tavium", is marketed under the alternate brand name Tavium® Plus VaporGrip® Technology. The purpose of this label amendment is to change the directions for use removing the December 20, 2020 automatic expiration and subsequent prohibition of use after this date. PRIA category R350, PRIA fee of \$13,888, 9 months review time.			
Section – III			
1. Material This Product Will Be Packaged In:			
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No <i>*Certification must be submitted</i>	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No If "Yes" No. per Unit Packaging wgt. Container	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No If "Yes" No. per Unit Packaging wgt. container	2. Type of Container <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container	
		5. Location of Label Directions <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph <input checked="" type="checkbox"/> Other <u>Pressure Sensitive</u> <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			
Section – IV			
1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)			
Name Montague Dixon		Title U.S. Regulatory Portfolio Lead, Herbicides	Telephone No. (Include Area Code) (336) 632-7055
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.			6. Date Application Received (Stamped)
2. Signature 		3. Title U.S. Regulatory Portfolio Lead, Herbicides monty.dixon@syngenta.com	
4. Typed Name Montague Dixon		5. Date 8/12/2020	

From: notification@pay.gov
To: [Eay Pat USGR](#)
Subject: Pay.gov Payment Confirmation: PRIA Service Fees
Date: Wednesday, August 12, 2020 2:51:39 PM

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Application Name: PRIA Service Fees
Pay.gov Tracking ID: 26PMA7CB
Agency Tracking ID: 76024206894
Transaction Type: Sale
Transaction Date: 08/12/2020 02:51:29 PM EDT
Account Holder Name: John Abbott
Transaction Amount: \$13,888.00
Card Type: Visa
Card Number: *****6322

Registration Number: 100-1623
Company Name: Syngenta Crop Protection,
Company Number: 100
Action Code: R350

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Travis Bui, Ph.D.
Regulatory Manager
Herbicides
(336) 632-6280 (Office)
(336) 632-5688 (Fax)
travis.bui@syngenta.com

Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, NC 27419-8300
www.syngenta.com

EPA PSP

January 15, 2020

Document Processing Desk (COR) (DATA)
Office of Pesticide Programs (7504P)
U.S. Environmental Protection Agency
2777 South Crystal Drive
Room S-4900, One Potomac Yard
Arlington, VA 22202-4501

Attn: Mr. Grant Rowland
Herbicide Branch, Registration Division

Subject: Tavium® (A21472) Plus VaporGrip® Technology (EPA Reg. No. 100-1623)
Submission of 2019 Annual Report and Studies Supporting Conditions of
Registration

Dear Mr. Rowland:

Syngenta Crop Protection, LLC, is submitting data in accordance with the Conditions of Registration (COR) for Tavium® (A21472) Plus VaporGrip® Technology (EPA Reg. No. 100-1623) issued on April 5, 2019. Per the COR, Syngenta has conducted the following studies which are included in this submission:

COR #	MRID	Study Title
14A	50958201	Off-target Movement Study of Dicamba (A21472E) Tank-Mixed with Roundup PowerMax Herbicide® and Intact™ - Northeast Region of Missouri
14A	50958202	Off-target Movement Study of Dicamba (A21472E) Tank-Mixed with Roundup PowerMax Herbicide® and Intact™ - Bootheel Region of Missouri
14A	50958203	Off-target Movement Study of Dicamba (A21472E) Tank-Mixed with Roundup PowerMax Herbicide® and Intact™ - Washington County, Mississippi
14B	50958205	Potential Effects of Clarity® (dicamba) Tank-Mixed with Roundup PowerMax® (glyphosate) on Non-Tolerant Dicamba/Glyphosate Tolerant Soybeans when Applied at Low Application Rates in the Field - Northeast Missouri
14B	50958206	Potential Effects of Clarity® (dicamba) Tank-Mixed with Roundup PowerMax® (glyphosate) on Non-Tolerant Dicamba/Glyphosate Tolerant Soybeans when Applied at Low Application Rates in the Field - Mississippi
15	50958208	Volatility of Dicamba – Containing Formulation Applied to Bare Soil under Laboratory Conditions: Effects of Temperature
17	50958207	Laboratory Study to Determine the Effect of Water pH in Tank Mixtures on Volatility Potential of Dicamba

COR #14 study requirements were subdivided into three study types (a,b,c)



Tavium® (A21472) Plus VaporGrip® Technology (EPA Reg. No. 100-1623)

As previously communicated to the Agency, one of the studies (COR 14b) investigating the potential effects of Clarity® (dicamba) tank-mixed with Roundup PowerMax® (glyphosate) on non-tolerant dicamba/glyphosate tolerant soybeans when applied at low application rates in the field conducted in the bootheel region of Missouri was terminated (Syngenta Study No.: TK0475489). A summary of that study, including reasons for termination is included in **Confidential Appendix A**.

Per the EPA review, “*Review of Dicamba DGA + S-Metolachlor Premix (EPA Reg. No. 100-1623, A21472 Plus VaporGrip Technology, a.k.a Tavium) Waiver Requests and Protocols, Submitted as Required in the “Additional Data Requirements” Section of the 4/5/2019 Pesticide Registration Notice*” dated 5/2/2019 (DP Barcode 451881), EFED granted Syngenta’s request to waive both the woody plant (COR 16) and the field irrigation (COR 14C) studies based upon the ability to bridge these data requirement to the corresponding studies being conducted by Bayer CropSciences. A letter of access to the aforementioned studies has been provided along with the MRID and study titles below:

COR	MRID	Study Title
16	51017507	Effects to trees from foliar application of dicamba Clarity® formulation – Interim Report. Study ID: HT19/015.
14C	51017508	A field-scale runoff study to determine dicamba herbicide runoff potential under furrow irrigated soybean production conditions. Study ID: WBE-2019-0078.

Finally, a report is included which summarizes the following components identified in the COR:

- Annual sales by state
- The current education program and associated materials; including updates to the training materials in future years
- Summary of efforts aimed at achieving implementation of best management practices (BMPs)
- Summary of determinations as to whether any reported lack of herbicide efficacy was “likely resistance”, follow-up actions taken, and ultimate outcome regarding each case
- Results of the annual survey, including whether growers are implementing herbicide resistance BMPs and a summary of the annual review and possible modification – based on the survey – of the education program and response to reports of likely resistance
- Summary of the status of any laboratory or greenhouse testing performed by, or at the direction of, Syngenta following up on incidents of likely resistance performed in the previous year



Tavium® (A21472) Plus VaporGrip® Technology (EPA Reg. No. 100-1623)

In support of this submission, in addition to the studies referenced above, please find enclosed

- Transmittal Document
- Letter of access for MRID 51017507 & 51017508
- 2019 Tavium® Plus VaporGrip® Technology Annual Report
- Copy of 2019 Tavium® Plus VaporGrip® Technology Application Education for Dicamba Herbicide
- Confidential Appendix A

If there are any questions concerning matters contained in this submission, please contact me at either 336-632-6280 or by email at travis.bui@syngenta.com you may contact my regulatory assistant at pat.eay@syngenta.com

Sincerely,

A handwritten signature in black ink, appearing to read "Travis Bui". The signature is fluid and cursive, with the first name and last name clearly distinguishable.

Travis Bui, Ph. D.
Regulatory Product Manager

Enclosed Information

Confidential Appendix A

Summary of Potential Effects of Clarity® (dicamba) Tank-Mixed with Roundup PowerMax® (glyphosate) on Non-Tolerant Dicamba/Glyphosate Tolerant Soybeans when Applied at Low Application Rates in the Field - Bootheel Region of Missouri

Stone Study Number: 19-084

Syngenta Study Number: TK0475489

Objectives:

The objective of this study was to evaluate the effects of low dose applications of dicamba (0.0003 – 0.0048 lb ae/A) (Clarity® formulation) tank mixed with the glyphosate (0.000675 – 0.0108 lb ae/A) (Roundup PowerMax® formulation) to non-dicamba tolerant/glyphosate-tolerant soybeans. The purpose of the low dose applications was to simulate off-target drift deposition. Measurements of soybean injury via visual injury ratings, soybean plant height and soybean yield were to be made to determine the relationship between visual soybean plant injury symptomology, plant height and yield at two developmental growth stage application timings, vegetative (V2-V5) and reproductive (R1).

Chronology of events leading to termination:

Soybean crop from the initial soybean planting July 8, 2019 sustained herbicide (dicamba) drift injury from surrounding fields in the area prior to the planned low dose application of dicamba/glyphosate. The damage was evident when the plots were inspected for crop staging August 4, 2019 (see **Figure 1**). Crop injury had affected an estimated 50-75% of the stand [Alex Gibbs, Lange Research and Consulting, Inc. (LRC), Personal Communication]. Injury of this magnitude was judged unacceptable for subsequent plant effects ratings. The entire crop was replanted August 9, 2019. Soybean stand from the August 9, 2019 planting was inspected August 26, 2019 and was found to have again sustained significant herbicide injury (see **Figure 2**) prior to the planned low dose application of dicamba/glyphosate. The injury was widespread across the test area [Alex Gibbs, (LRC), Personal Communication].

Reason for Termination:

This study was designed to measure plant injury based on dicamba drift exposure and also measure impact of this exposure on yield. The apparent continuing injury from local dicamba applications, compromised/confounded the ability to generate any meaningful data.

[Master]

RESTRICTED USE PESTICIDE

For retail sale to and use only by Certified Applicators.

~~This labeling expires 12/20/2020. Do not use or distribute this product after 12/20/2020.~~

A21472 Plus VaporGrip® Technology must only be used for the uses specified on this label and only in the following states, subject to county restriction as noted: Alabama, Arkansas, Arizona, Colorado, Delaware, Florida (excluding Palm Beach County), Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Jersey, New Mexico, New York (excluding Nassau and Suffolk Counties), North Carolina, North Dakota, Oklahoma, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee (excluding Wilson County), Texas (excluding use on cotton in Gaines County), Virginia, West Virginia, Wisconsin

Sale, use and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.

DICAMBA	GROUP	4	HERBICIDE
S-METOLACHLOR	GROUP	15	HERBICIDE

Primary Brand Name:

A21472 Plus VaporGrip® Technology

Alternate Brand Name:

Tavium® Plus VaporGrip® Technology

Herbicide

Foliar systemic broadleaf herbicide with residual grass and certain broadleaf weed control for dicamba-tolerant cotton and soybeans and non-dicamba-tolerant soybeans

Active Ingredients:

Diglycolamine salt of dicamba*:.....17.7%

S-metolachlor**:24.0%

Other Ingredients:.....58.3%

Total:.....100.0%

*CAS No. 104040-79-1

**CAS No. 87392-12-9

A21472 Plus VaporGrip Technology is a capsule suspension (CS) formulation containing 1.12 pounds of dicamba acid equivalent (ae) and 2.26 pounds of S-metolachlor per U.S. gallon.

KEEP OUT OF REACH OF CHILDREN

CAUTION

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1623

EPA Est.

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1.0 FIRST AID

FIRST AID	
If swallowed	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If on skin or clothing	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or doctor for treatment advice.
If in eyes	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.• Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOTLINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident) Call 1-800-888-8372	

2.0 PRECAUTIONARY STATEMENTS

2.1 Hazards to Humans and Domestic Animals

CAUTION

Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

2.2 Personal Protective Equipment (PPE)

All mixers, loaders, applicators, and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or Viton® ≥ 14 mils
- Shoes plus socks

2.2.1 User Safety Requirements

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

2.2.2 Engineering Controls

When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

2.2.3 User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

2.3 Environmental Hazards

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinsate. Apply this product only as directed on the label.

2.3.1 Groundwater Advisory

S-metolachlor is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Dicamba is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

2.3.2 Surface Water Advisory

One of the active ingredients in A21472 Plus VaporGrip Technology, S-metolachlor, has the potential to contaminate surface water through ground spray drift. Under some conditions, the active ingredient may also have a high potential for runoff into surface water (primarily via dissolution in runoff water) for several months post-application. These include poorly drained or wet soils with readily visible slopes toward adjacent surface waters, areas that frequently flood, areas overlaying extremely shallow ground water, areas with in-field canals or ditches

that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas overlaying tile drainage systems that drain to surface water.

2.3.3 Mixing/Loading Instructions

Care must be taken when using this product to prevent back-siphoning into wells, spills, or improper disposal of excess pesticide, spray mixtures, or rinsates. Check-valves or anti-siphoning devices must be used on all mixing equipment.

- This product must not be mixed or loaded within 50 ft of perennial or intermittent streams and rivers, natural or impounded lakes and reservoirs.
- This product must not be mixed, loaded or used within 50 ft of all wells, including abandoned wells, drainage wells, and sink holes.
- Operations that involve mixing, loading, rinsing, or washing of this product into or from pesticide handling, or application equipment or containers within 50 ft of any well are prohibited, unless conducted on an impervious pad.
 - The pad must be constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad.
 - The pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or washwater, and rain water that may fall on the pad.
 - Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained.
 - The pad shall be sloped to facilitate material removal.
 - An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad.
 - A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad, shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad.
- Containment capacities as described above shall be maintained at all times.

The above-specified minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading site.

2.3.4 Endangered Species Concerns

Prior to making an application of this product on dicamba-tolerant cotton or dicamba-tolerant soybeans, an applicator must visit <http://www.epa.gov/espp/> to determine if there are any additional restrictions on A21472 Plus VaporGrip Technology use within the area to be sprayed. Within the defined areas, in combination with the 110 foot infield wind-directional spray drift buffer, a 57 foot omnidirectional infield buffer is required to protect federally listed threatened and endangered species.

The use of any pesticide in a manner that may kill or otherwise harm an endangered species or adversely modify their habitat is a violation of federal law. Use of this product may pose a hazard to endangered or threatened species. When using this product, you must follow the measures contained in the Endangered Species Protection Bulletin for the area in which you are applying the product. To obtain Bulletins, no more than six months before using this product, consult <http://www.epa.gov/espp/> or call 1-844-447-3813. You must use the Bulletin valid for the month in which you will apply the product.

It is a Federal offense to use any pesticide in a manner that results in the death of an endangered species.

2.4 Physical or Chemical Hazards

Do not use or allow coming in contact with oxidizing agents. Hazardous chemical reaction may occur.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

This is a restricted use pesticide.

Sale, use and distribution of this product in Nassau and Suffolk Counties in the State of New York is prohibited.

~~This labeling expires 12/20/2020. Do not use or distribute this product after 12/20/2020.~~

Use A21472 Plus VaporGrip Technology only in accordance with specifications on this label, or in separately EPA-approved labeling instructions for this product.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

FAILURE TO FOLLOW DIRECTIONS AND PRECAUTIONS ON THIS LABEL MAY RESULT IN CROP INJURY, POOR WEED CONTROL, AND/OR ILLEGAL RESIDUES.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 24 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls worn over short-sleeved shirt and short pants
- Chemical-resistant gloves made of: barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, natural rubber ≥ 14 mils, polyethylene, polyvinyl chloride (PVC) ≥ 14 mils, or Viton® ≥ 14 mils
- Chemical-resistant footwear plus socks
- Chemical-resistant headgear for overhead exposure
- Protective eyewear

3.0 PRODUCT INFORMATION

A21472 Plus VaporGrip Technology is a foliar systemic broadleaf herbicide with residual control of grass and certain broadleaf weeds in:

- dicamba-tolerant cotton (preplant, at-planting, preemergence, postemergence (In-crop) application)
- dicamba-tolerant soybeans (preplant, at-planting, preemergence, postemergence (In-crop) application)
- non-dicamba-tolerant soybeans (preplant application)

This product needs a minimum of ½ inch of either rainfall or irrigation following application to activate residual weed control. If rainfall or irrigation is not received within 10 days after application, residual weed control may be reduced. Under these conditions, cultivate or use other weed control measures if weeds develop.

Rainfall or irrigation occurring within 4 hours after postemergence application may reduce effectiveness.

3.1 Weed Resistance Management Practices

DICAMBA	GROUP	4	HERBICIDE
S-METOLACHLOR	GROUP	15	HERBICIDE

For resistance management, please note that A21472 Plus VaporGrip Technology contains both a Group 4/[dicamba] and a Group 15/[S-metolachlor] herbicide. Any weed population may contain plants naturally resistant to Group 4 and/or Group 15 herbicides. The resistant individuals may dominate the weed population if these herbicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

Contact your local Syngenta representative, retailer, crop advisor or extension agent to determine if weeds resistant to modes of action contained in this product are present in your area. Do not assume that each listed weed is being controlled by multiple modes of action. Premixes are intended to broaden the spectrum of weeds that are controlled. Some weeds may be controlled by only one of the active ingredients in this product. If resistant biotypes

have been reported, use the full labeled rate of this product, apply at the labeled timing, and tank-mix with an additional different mode of action product so there are multiple effective modes of application for each suspected resistant weed.

3.1.1 Principles of Herbicide Resistant Weed Management

Scout and know your field

- Know weed species present in the field to be treated through scouting and field history. An understanding of weed biology is useful in designing a resistance management strategy. Ensure the weed management program will control all weeds present.
- Fields should be scouted prior to application to determine species present and growth stage. Always apply this herbicide at the full labeled rate and correct timing for the weeds present in the field.

Utilize non-herbicidal practices to add diversity

- Use diversified management tactics such as cover crops, mechanical weed control, harvest weed seed control, and crop rotation as appropriate.

Use good agronomic practices, start clean and stay clean

- Use good agronomic practices that enhance crop competitiveness.
- Plant into weed-free fields utilizing tillage or an effective burndown herbicide for control of emerged weeds.
- Sanitize farm equipment to avoid spreading seed or vegetative propagules prior to leaving fields.

Difficult to control weeds

- Fields with difficult to control weeds should be planted in rotation with crops that allow the use of herbicides with an alternative mode of action or different management practices.
- Difficult to control weeds may require sequential applications, such as a broad spectrum preemergence herbicide followed by one or more postemergence herbicide applications. Utilize herbicides containing different modes of action effective on the target weeds in sequential applications.

Do not overuse the technology

- Do not use more than two applications of this or any other herbicide with the same mode of action in a single growing season unless mixed with an herbicide with a different mode of action which provides overlapping spectrum for the difficult to control weeds.

Scout and inspect fields following application

- Prevent an influx of weeds into the field by controlling weeds in field borders.
- Scout fields after application to verify that the treatment was effective.

- Suspected herbicide resistant weeds may be identified by these indicators
 - Failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds;
 - A spreading patch of non-controlled plants of a particular weed species; and
 - Surviving plants mixed with controlled individuals of the same species.
- Report non-performance of this product to your Syngenta retailer, Syngenta representative, or call 1-866-Syngent(a) (866-796-4368). If resistance is suspected ensure weed escapes are controlled using an herbicide with an effective mode of action and/or use non-chemical means to prevent further seed production.

Prevent weed escapes before, during, and after harvest

Do not allow weed escapes to produce seed or vegetative structures such as tubers or stolons which contribute to spread and survival. Consider harvest weed seed management and control weeds post-harvest to prevent seed production.

4.0 APPLICATION DIRECTIONS

4.1 Training

Prior to applying this product in the 2019 growing season and each growing season thereafter, applicator(s) must complete dicamba or auxin-specific training. If training is available and required by the state where the applicator intends to apply this product, the applicator must complete that training. If the state where the application is intended does not require auxin or dicamba-specific training, then the applicator must complete dicamba or auxin-specific training provided by one of the following sources: a) a registrant of a dicamba product approved for in-crop use with dicamba-tolerant crops, or b) a state or state-authorized provider.

4.2 Record Keeping

Record keeping is required for applications of this product. **The certified applicator must keep the following records for a period of two years;** records must be generated as soon as practical but no later than 72 hours after application and a record must be kept for each application of A21472 Plus VaporGrip Technology. Records must be made available to State Pesticide Control Official(s), USDA, and EPA upon request. An example form summarizing record keeping requirements can be found on www.TaviumTankMix.com.

1. All Items required by 7 CFR Part 110 (RECORDKEEPING ON RESTRICTED USE PESTICIDES BY CERTIFIED APPLICATORS) including:
 - a. The brand or product name
 - b. The EPA registration number
 - c. The total amount applied
 - d. The month, day, and year of application
 - e. The location of the application
 - f. The crop, commodity, stored product, or site of application

- g. The size of treated area
 - h. The name of the certified applicator
 - i. The certification number of the certified applicator
2. Training: Date and provider of required training completed and proof of completion.
 3. Receipts of Purchase: Receipts or copies for the purchase of this product.
 4. Product Label: A copy of this product label, and any state special local needs label that supplements this label.
 5. Crop Planting Date: Record of the date at which the crop was planted.
 6. Buffer Requirement: Record of the buffer distance calculation and any areas included within the buffer distance calculations as allowed in Section 7.3.7.
 7. Sensitive Crops Awareness: Record that a sensitive crop registry was consulted and survey adjacent fields documenting the crops/areas surrounding the field prior to application. At a minimum, records must include the name of the sensitive crop registry and the date it was consulted and documentation of adjacent crops/areas and the date the survey was conducted (read Section 7.3.8 for additional information).
 8. Start and Finish Times of Each Application: Record of the time at which the application started and the time when the application finished.
 9. Application Timing: Record of the type of application (for example: preemergence, postemergence) and number of days after planting if postemergence.
 10. Air Temperature: Record of the air temperature in degrees Fahrenheit at the start and completion of each application.
 11. Wind Speed and Direction: Record of the wind speed and direction (the direction from which the wind is blowing) at boom height at the start and completion of each application of this product (Read Section 7.3 for information on wind speed).
 12. Nozzle and Pressure: Record of the spray nozzle manufacturer/brand, type, orifice size, and operating pressure used during each application of this product (Read Section 7.3.1 for information on nozzles and pressures.)
 13. Tank Mix Products: Record of the brand names and EPA registration numbers (if available) for all products (pesticides, adjuvants, and other products) that were tank mixed with this product for each application (Read Section 4.7 for more information on tank mixing.)
 14. Spray System Cleanout: Record of compliance with the section of this label titled Section 4.8: Proper Spray System Equipment Cleanout. At a minimum, records must include the confirmation that the spray system was clean before using this product and that the post-application cleanout was completed in accordance with Section 4.8.

4.3 Methods of Application

Applications with A21472 Plus VaporGrip Technology alone or in tank mixtures are permitted with ground equipment only. Preplant, at-planting, preemergence and postemergence (In-crop) applications are allowed as specified in **Section 9.0** unless otherwise restricted in **Section 7.1**.

4.4 Application Equipment

- Configure spray equipment to provide accurate and uniform coverage of the target area and minimize potential for spray drift.
- To ensure accuracy, calibrate sprayer before each use. For information on spray equipment and calibration, consult spray equipment manufacturers and/or state recommendations.
- Only use sprayers that provide accurate and uniform application with nozzles designed to produce **extremely coarse to ultra-coarse** droplets in order to minimize drift (**Section 7.3.1**) and provide uniform coverage. The applicator must check the website found at www.TaviumTankMix.com for the list of nozzles approved for use with this product no later than seven days prior to application.
- Avoid using screens and strainers finer than 50-mesh.
- All ground application equipment must be properly maintained.
- All equipment must be washed to remove product residues after use (**Section 4.8**).

4.5 Application Volume and Spray Coverage

- For ground application, apply alone or in tank mixtures **in a minimum of 15 gal/A of spray solution**.
- Good spray coverage of emerged weeds is essential for optimum control.
- When weed vegetation is dense, increase spray volume and pressures to ensure coverage of the target weeds.
- Spray boom and nozzle heights must be adjusted to provide coverage of target weeds but not more than 24 inches above the target.

4.6 Equipment Ground Speed

Do not exceed a ground speed of 15 miles per hour. Select a ground speed that will deliver the desired spray volume while maintaining the desired spray pressure, but slower speeds generally result in better spray coverage and deposition on the target area. Provided the applicator can maintain the required nozzle pressure, it is recommended that tractor speed is reduced to 5 miles per hour at field edges.

4.7 Mixing Directions

1. A21472 Plus VaporGrip Technology may only be tank-mixed with products that have been tested and found not to adversely affect the offsite movement potential of A21472 Plus VaporGrip Technology. The applicator must check the website found at www.TaviumTankMix.com no more than 7 days before applying A21472 Plus VaporGrip Technology.
2. Thoroughly clean spray equipment before using this product (**Section 4.8**). Dispose of the cleaning solution in a responsible manner.
3. Prepare no more spray mixture than is needed for the immediate operation.
4. Flush the spray equipment thoroughly following each use and apply the rinsate to a previously treated area.
5. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions

must be disposed of according to federal, state, or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office.

4.7.1 A21472 Plus VaporGrip Technology Alone

1. Fill the spray tank $\frac{1}{2}$ to $\frac{3}{4}$ full with clean water.
2. Begin tank agitation and continue throughout mixing and spraying.
3. Add A21472 Plus VaporGrip Technology.
4. Add spray additives.
5. Fill the remainder of spray tank.
6. The tank mixture should be sprayed out as soon as it is prepared.

4.7.2 Tank-Mix Restrictions

- **DO NOT** tank mix products containing ammonium salts such as ammonium sulfate (AMS) and urea ammonium nitrate (UAN). Small quantities of AMS can greatly increase the volatility potential of dicamba. Read the TANK MIXING INSTRUCTIONS of this label (Section 4.7) for instructions regarding other tank mix products.
- **DO NOT** tank mix any product with A21472 Plus VaporGrip Technology unless:
 - The intended tank-mix product is identified on the list of tested products found at www.TaviumTankMix.com;
 - The intended products are not prohibited on either this label or the label of the tank mix product; and
 - All requirements and restrictions on www.TaviumTankMix.com; are followed.

4.7.3 Tank-Mix Precautions

- Auxin herbicides such as dicamba have the potential to volatilize in lower pH spray mixtures. Knowing the pH of your spray mixture and making the appropriate adjustments to avoid a low pH spray mixture (e.g., pH less than 5) can reduce the potential for volatilization to occur. Talk to your local agricultural consultant, extension agent, or Syngenta representative for recommendations to prevent low pH spray mixtures.
- Observe all precautions, directions for use and restrictions on the labels of each product used in tank mixtures.
- Follow the most restrictive label precautions and limitations.
- It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
- Do not tank mix products containing ammonium salts such as ammonium sulfate and urea ammonium nitrate.
- Tank mixes with other pesticides, fertilizers, or any other additives not specifically labeled for use with A21472 Plus VaporGrip Technology may result in tank mix incompatibility or unsatisfactory performance. In such cases, always check tank mix compatibility by conducting a jar test according to guidance in **Section 4.7.4** before actual tank mixing.

4.7.4 Tank-Mix Compatibility Test

- Conduct a jar test using a 1 pt to 1 qt container with lid by adding water or other intended carrier such as a liquid fertilizer to the jar.
- Next, add the appropriate amount of pesticide(s) or tank-mix partner(s) in their relative proportions based on label rates. Add tank-mix components separately in the order described in the tank-mixing section, **Section 4.7.5**. After each addition, shake or stir gently to thoroughly mix.
- After all ingredients have been added, put the lid on the jar, tighten and invert the jar 10 times to mix.
- After mixing, let the mixture stand 15 – 30 minutes and then examine for signs of incompatibility such as obvious separation, large flakes, precipitates, gels or heavy oily film on the jar.
- If the mixture remains mixed or can be remixed readily, it is physically compatible and can be used.
- If the mixture is incompatible, repeat the test using a compatibility agent at the label rate. Or, if applicable, slurry dry formulations in water before adding to the jar. If incompatibility is still observed after following these procedures, do not use the mixture.
- After compatibility testing is complete, dispose of any pesticide wastes in accordance with the storage and disposal section, **Section 10.0**, of this label.

4.7.5 A21472 Plus VaporGrip Technology In Tank Mixtures

1. Fill the spray tank $\frac{1}{2}$ to $\frac{3}{4}$ full with clean water.
2. Begin tank agitation and continue throughout mixing and spraying.
3. Be sure to allow each tank-mix component to fully disperse before adding the next one.
4. Add dry formulations (WP, DF, etc.) to tank.
5. Add A21472 Plus VaporGrip Technology.
6. Add liquid formulations (EC, SC, SL, etc.) to tank.
7. Add spray additives.
8. Fill remainder of spray tank.
9. The tank mixture should be sprayed out as soon as it is prepared.

4.7.6 Spray Additives

Spray additives may be appropriate for some tank mixes with A21472 Plus VaporGrip Technology. Refer to **Section 9.0** for specific instructions for the crop of interest.

4.8 Sprayer Cleanout

As part of the Restricted Use Product requirements, applicators must document that they have complied with the Sprayer Clean-out section of this label

Severe crop injury may occur if any of this product remains in the spray system equipment following an application and the equipment is subsequently used for application to sensitive crops. After using this product, clean all mixing and spray equipment (including tanks, pumps,

lines, filters, screens, and nozzles) with a strong detergent based sprayer cleaner. The rinsate must be disposed in compliance with local, state, and federal guidelines.

Inadvertent contamination can also occur in equipment used for bulk product handling and mixing prior to use in the spray system. Care should be taken to reduce contamination not only in the spray system but in any equipment used to transfer or deliver product. For example, bulk handling and mixing equipment containing this product should be segregated when possible to reduce potential for cross-contamination. Consider using block and check valves to avoid backflow during transfer. Piping should be reviewed to ensure there not potential for product build-up. Dedicated nurse trucks and tender equipment should be used when possible.

To avoid subsequent injury to other crops, thoroughly clean mixing and application equipment immediately after spraying. The following instructions are provided:

1. **Do not** clean sprayer near desirable vegetation, wells or other water sources.
2. Drain and flush tank walls, boom and all hoses with clean water.
3. Prepare a cleaning solution with a detergent or a commercial sprayer cleaner or ammonia according to the product's use directions.
4. Be sure to wash all internal parts of the tank, including the inside top surface with the cleaning solution. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
5. Flush hoses, spray lines and nozzles for at least one minute with the cleaning solution.
6. Repeat steps 3-5 for two additional times.
7. Remove nozzles, screens and strainers, and clean separately in the cleaning solution after completing the above procedures.
8. Drain lines, filters and sump.
9. Rinse the complete spraying system with clean water.
10. Clean and wash off the outside of the entire sprayer and boom.
11. Dispose of all rinsate according to local, state and federal regulation.

5.0 REPLANT AND ROTATIONAL CROP

5.1 Replanting Crop Restrictions for Cotton and Soybeans

Cotton and soybeans may be replanted at the specified interval following application of A21472 Plus VaporGrip Technology. Exclude counting days from application when the ground is frozen.

Crop	Replanting Interval
Dicamba-tolerant cotton Dicamba-tolerant soybeans	0 days
Non-dicamba-tolerant soybeans	28 days following a minimum accumulation of 1 inch of rainfall or overhead irrigation
Non-dicamba-tolerant cotton	42 days following a minimum accumulation of 1 inch of rainfall or overhead irrigation

5.2 Rotational Crop Restrictions

The following crops may be planted at the specified interval following application of A21472 Plus VaporGrip Technology. Exclude counting days from application when the ground is frozen.

Crop	Plant-Back Interval
Corn (field, pop, seed, sweet)	4 months
Barley Oats Rye Wheat	4 ½ months
Alfalfa Bean Beet Broccoli Brussels sprouts Cabbage Carrot Cauliflower Celery Garlic Lentil Onion Pea Peanut Pepper Potato Pumpkin Radish Sorghum Sunflower Sugar beet Sweet potato Tomato	6 months
Clover (seeded)	9 months
Buckwheat Rice Tobacco	In the next spring following treatment
All other crops not listed above	12 months

6.0 COVER CROPS

A cover crop can be an important tool for the overall farm cropping system. Cover crops are planted for conservation purposes, soil erosion control, soil health improvement, water quality improvement and weed management. A cover crop can be a single crop or a combination of crops, including grasses and/or broadleaf crops.

After harvest of an A21472 Plus VaporGrip Technology treated crop, planting of a cover crop is allowed, provided the cover crop is not grazed or fed to livestock nor harvested for food. Terminate the cover crop through natural causes, such as frost or intentional termination by herbicide application, crimping, rolling, tillage or cutting.

All possible cover crops or cover crop combinations have not been tested for tolerance to this product. Before planting the cover crop, determine the level of tolerance for the intended cover crops by conducting a field bioassay. Refer to **Section 6.1** for instructions on how to conduct a field bioassay.

6.1 Field Bioassay for Cover Crops

A field bioassay is a method of determining if herbicide residues are present in the soil at concentrations high enough to adversely affect crop growth.

Conduct the field bioassay by planting several strips of the desired cover crop across the field which has been previously treated with A21472 Plus VaporGrip Technology. Plant the cover crop strips perpendicular to the direction of the product application. Locate the strips so that all the different field conditions are encountered, including differences in field terrain, soil texture, organic matter, pH, and drainage.

If the cover crop does not show adverse effects such as crop injury and/or stand reduction, the field can be planted to this cover crop. If injury and/or stand reduction are visible, wait two to four weeks for further herbicide degradation to occur and repeat the bioassay. Alternatively, select a different cover crop and repeat the bioassay. Only plant cover crops that show acceptable tolerance in the field bioassay.

7.0 RESTRICTIONS AND PRECAUTIONS

7.1 Use Restrictions

- **DO NOT** sell, use or distribute this product in Nassau and Suffolk Counties in the State of New York.
- **DO NOT** use in nurseries, turf, or landscape plantings.
- **DO NOT** apply this product by air.
- **DO NOT** apply this product through any type of irrigation system.
- **DO NOT** apply this product at ground speed greater than 15 miles per hour.
- **DO NOT** apply this product in less than 15 gallons of spray solution per acre.
- **DO NOT** exceed a boom height of 24 inches above target pest or crop canopy when applying this product.
- **DO NOT** apply this product when the wind speeds are less than 3 mph or greater than 10 mph.
- **DO NOT** apply this product until at least one hour after sunrise and no later than two hours before sunset.
- **DO NOT** apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow.
- **DO NOT** apply under conditions which favor runoff or wind erosion of soil containing this product to nontarget areas.

- **DO NOT** tank mix products containing ammonium salts such as ammonium sulfate and urea ammonium nitrate.
- **DO NOT** graze or feed to livestock, or harvest for food, any cover crop planted following an A21472 Plus VaporGrip Technology treated crop.
- **DO NOT** apply to frozen ground.
- **DO NOT** apply to any body of water.
- **DO NOT** contaminate irrigation ditches.
- **DO NOT** apply this product if rainfall that could exceed soil field capacity and result in soil runoff is expected in the next 24 hours.
- **DO NOT** apply to powdery dry or light sand soils when conditions are favorable for wind erosion. Under these conditions, you must ensure that the soil surface is first settled by rainfall or irrigation prior to application.
- **DO NOT** apply to impervious substrates, such as paved or highly compacted surfaces.
- **DO NOT** use tailwater from the first flood or furrow irrigation of treated fields to treat nontarget crops, unless at least ½ inch of rainfall has occurred between application and the first irrigation.
- Prior to making an application of this product on dicamba-tolerant cotton or dicamba-tolerant soybeans, an applicator must visit <http://www.epa.gov/espp/> to determine if there are any additional restrictions on A21472 Plus VaporGrip Technology use within the area to be sprayed. Within the defined areas, in combination with the 110 foot infield wind-directional spray drift buffer, a 57 foot omnidirectional infield buffer is required to protect federally listed threatened and endangered species.

A21472 Plus VaporGrip Technology must only be used for the uses specified on this label and only in the following states, subject to county restriction as noted	
Alabama	Missouri
Arkansas	Nebraska
Arizona	New Jersey
Colorado	New Mexico
Delaware	New York (excluding Nassau & Suffolk Counties)
Florida (excluding Palm Beach County)	North Carolina
Georgia	North Dakota
Illinois	Oklahoma
Indiana	Ohio
Iowa	Pennsylvania
Kansas	South Carolina
Kentucky	South Dakota
Louisiana	Tennessee (excluding Wilson County)
Maryland	Texas (excluding use on cotton in Gaines County)
Michigan	Virginia
Minnesota	West Virginia
Mississippi	Wisconsin

This product must only be used in the states listed above and is subject to area specific restrictions as required by <http://www.epa.gov/espp/> that must be consulted prior to making an application in dicamba-tolerant cotton or dicamba-tolerant soybeans.

7.2 Use Precautions

- A21472 Plus VaporGrip Technology requires actively growing green plant tissue to function fully for postemergence weed control. Application to drought-stressed weeds or weeds with little green foliage (i.e., mowed, cut, or hauled on weeds); weeds covered with dust; weeds damaged by insects or diseases may result in reduced weed control.
- Drift may cause damage to nontarget vegetation.
- Avoid spray overlap, as crop injury may result.
- Before planting a cover crop, determine the level of tolerance for the intended cover crop to A21472 Plus VaporGrip Technology by conducting a field bioassay (**Section 6.1**).
- Thoroughly clean the spray system using either a solution of water/strong detergent or a commercially available tank cleaner after each use (**Section 4.8**).

7.3 Spray Drift Management

- Do not apply when weather conditions may cause drift to nontarget areas. Drift may result in injury to adjacent crops and vegetation. To avoid spray drift, DO NOT apply when the wind speed is less than 3 mph or greater than 10 mph or during periods of temperature inversions.
- AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.
- The interaction of many equipment- and weather-related factors determines the potential for spray drift. The applicator is responsible for considering these factors when making a decision.
- This pesticide may only be applied when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, nontarget plants) is minimal (i.e., when the wind is blowing away from the sensitive area).
- Consult with local and State agricultural authorities for information regarding avoiding or minimizing spray drift.

7.3.1 Importance of Droplet Size

- The best drift management strategy is to apply the largest droplets that provide sufficient coverage and control. Use only nozzles producing **extremely coarse to ultra-coarse** droplets as defined by the American Society of Agricultural and Biological Engineers (ASABE) S-572.2. See www.TaviumTankMix.com for the list of nozzles approved for use with this product.
- Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions.

7.3.2 Controlling Droplet Size

- **Volume** – Use high flow rate nozzles to apply the highest practical spray volume not less than 15 gallons per acre. Nozzles with higher rated flows produce larger droplets.
- **Pressure** – **DO NOT** exceed the nozzle manufacturer's specified pressures or maximum pressures as listed for specific nozzles on www.TaviumTankMix.com. For many nozzle

types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure. If sprayer is equipped with rate controller hardware, ensure it does not allow pressure increases that exceed the desired range.

- **Number of nozzles** – Use the minimum number of nozzles that provide uniform coverage.

7.3.3 Application Height

Spray at the appropriate boom height based on nozzle selection and nozzle spacing, but do not exceed a boom height of 24 inches above target pest or crop canopy. Excessive boom height will increase the drift potential.

7.3.4 Wind

Drift potential is lowest when wind speeds are 3 to 10 mph. **DO NOT** apply this product when the wind speed is less than 3 mph or greater than 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. **NOTE:** Local terrain can influence wind patterns.

7.3.5 Temperature and Humidity

When making applications in low relative humidity or temperatures above 91 degrees Fahrenheit, set up equipment to produce larger droplets to compensate for evaporation (for example: increase orifice size and/or increase spray volume as directed on www.TaviumTankMix.com). Larger droplets have a lower surface to volume ratio and can be impacted less by temperature and humidity. Droplet evaporation is most severe when conditions are both hot and dry.

7.3.6 Temperature Inversions

- **DO NOT apply during a temperature inversion**, because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions, due to the light variable winds common during inversions.
- **DO NOT** apply this product until at least one hour after sunrise and no later than two hours before sunset.
- Temperature inversions are characterized by increasing temperatures with altitude, and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning.
- Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.
- The inversion will typically dissipate with increased winds (above 3 miles per hour) or at sunrise when the surface air begins to warm (generally 3°F from morning low).

7.3.7 Sensitive Areas

- **DO NOT apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or the crops thereof may be rendered unfit for sale, use or consumption.**
- Apply A21472 Plus VaporGrip Technology only when the potential for drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, nontarget crops) is minimal (i.e., when wind is blowing away from the sensitive areas).
- When applying this product a **110-foot downwind buffer must be maintained** between the last treated row, and the closest downwind edge (in the direction in which the wind is blowing).
- To maintain this required buffer zone, no application swath can be initiated in, or into an area that is within the applicable buffer distance.
- The following areas may be included in the buffer distance calculation when adjacent to field edges:
 - Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field such as rights-of-ways.
 - Planted agricultural fields containing: corn, dicamba-tolerant cotton, dicamba-tolerant soybeans, sorghum, proso millet, small grains and sugarcane. If the applicator intends to include such crops as dicamba-tolerant cotton and/or dicamba-tolerant soybeans in the buffer distance calculation, the applicator must confirm the crops are in fact dicamba-tolerant and not conventional cotton and/or soybeans.
 - Agricultural fields that have been prepared for planting.
 - Areas covered by the footprint of a building, silo, or other man-made structure with walls and/or roof.
- Applicators are required to ensure that they are aware of the proximity to sensitive areas, to avoid potential adverse effects from off-target movement of A21472 Plus VaporGrip Technology.

7.3.8 Sensitive Crops

To protect sensitive crops, the following restrictions must be followed.

- Before making an application, the applicator must survey the application site for adjacent nontarget sensitive crops. The applicator must also consult applicable sensitive crop registries to identify any commercial specialty or certified organic crops that may be located near the application site. At a minimum, records must include the name of the sensitive crop registry and the date it was consulted and documentation of adjacent crops/areas and the date the survey was conducted.
- **DO NOT APPLY** this product when the wind is blowing toward adjacent non-dicamba-tolerant sensitive crops; this includes **NON-DICAMBA-TOLERANT SOYBEAN AND COTTON**.

- During application and sprayer clean-out DO NOT allow contact of herbicide with foliage, green stems, exposed non-woody roots of crops, and desirable plants.

In addition to the required 110 foot down wind spray buffer, additional protections are required for dicamba sensitive crops. DO NOT apply when wind is blowing in the direction of neighboring sensitive crops.

The applicator must be aware that wind direction may vary during the application. If wind direction shifts such that the wind is blowing toward adjacent sensitive crops, the applicator must STOP the application.

Crops known to be sensitive include but are not limited to:

- non-dicamba-tolerant soybeans
- non-dicamba-tolerant cotton
- EPA Crop Group 6 (peas and beans)
- EPA Crop Group 8 (fruiting vegetables including peppers and tomatoes)
- EPA Crop Group 9 (cucurbit group including cucumbers and melons)
- flowers
- fruit trees
- grapes
- ornamental plantings including broadleaf ornamentals grown in greenhouses and shadehouses
- other broadleaf plants
- peanuts
- potatoes
- sweet potatoes
- sunflower
- tobacco

Sensitive Crops may be severely injured or killed if they are contacted by this product.

8.0 WEEDS CONTROLLED BY A21472 PLUS VAPORGRIP TECHNOLOGY

8.1 Weeds Controlled by A21472 Plus VaporGrip Technology Applied Prior to Weed Emergence

Common Name	Scientific Name
Amaranth, Palmer	<i>Amaranthus palmeri</i>
Amaranth, Powell	<i>Amaranthus powellii</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>
Crabgrass, large	<i>Digitaria ischaemum</i>
Crabgrass, smooth	<i>Digitaria sanguinalis</i>

Common Name	Scientific Name
Crowfootgrass	<i>Dactyloctenium aegyptium</i>
Foxtail, giant	<i>Setaria faberi</i>
Foxtail, green	<i>Setaria viridis</i>
Foxtail, yellow	<i>Setaria pumila</i>
Goosegrass	<i>Eleusine indica</i>
Nightshade, Eastern black	<i>Solanum ptychanthum</i>
Panicum, fall	<i>Panicum dichotomiflorum</i>
Pigweed, prostrate	<i>Amaranthus blitoides</i>
Pigweed, redroot	<i>Amaranthus retroflexus</i>
Pigweed, smooth	<i>Amaranthus hybridus</i>
Pigweed, tumble	<i>Amaranthus albus</i>
Pusley, Florida	<i>Richardia scabra</i>
Signalgrass, broadleaf	<i>Urochloa platyphylla</i>
Waterhemp, common	<i>Amaranthus rudis</i>
Waterhemp, tall	<i>Amaranthus tuberculatus</i>
Witchgrass	<i>Panicum capillare</i>

8.2 Weeds Controlled by A21472 Plus VaporGrip Technology Applied Postemergence to Weeds

Common Name	Scientific Name
Amaranth, Palmer	<i>Amaranthus palmeri</i>
Amaranth, Powell	<i>Amaranthus powellii</i>
Amaranth, spiny	<i>Amaranthus spinosus</i>
Beggarweed, Florida	<i>Desmodium tortuosum</i>
Buckwheat, wild	<i>Polygonum convolvulus</i>
Buffalobur	<i>Solanum rostratum</i>
Burcucumber	<i>Sicyos angulatus</i>
Buttercup	<i>Ranunculus</i> spp.
Carpetweed	<i>Mullugo verticillata</i>

Common Name	Scientific Name
Chickweed, common	<i>Stellaria media</i>
Cocklebur, common	<i>Xanthium strumarium</i>
Copperleaf, hophornbeam	<i>Acalypha ostryifolia</i>
Croton, tropic	<i>Croton glandulosus</i>
Cutleaf eveningprimrose	<i>Oenothera laciniata</i>
Falseflax, smallseed	<i>Camelina microcarpa</i>
Fleabane, annual	<i>Erigeron annus</i>
Goosefoot, nettleleaf	<i>Chenopodium murale</i>
Henbit	<i>Lamium amplexicaule</i>
Horseweed/Marestail	<i>Conyza canadensis</i>
Jimsonweed	<i>Datura stramonium</i>
Knotweed, prostate	<i>Polygonum aviculare</i>
Kochia	<i>Kochia scoparia</i>
Lambsquarters, common	<i>Chenopodium album</i>
Lettuce, prickly	<i>Lactuca serriola</i>
Mayweed	<i>Anthemis cotula</i>
Morningglory, ivyleaf	<i>Ipomoea hederacea.</i>
Morningglory, tall	<i>Ipomoea purpurea</i>
Mustard, black	<i>Brassica nigra</i>
Mustard, blue	<i>Chorispora tenella</i>
Mustard, tansy	<i>Descurainia pinnata</i>
Mustard, tumble	<i>Sisymbrium altissimum</i>
Mustard, wild	<i>Brassica kaber</i>
Nightshade, black	<i>Solanum nigrum</i>
Nightshade, cutleaf	<i>Solanum triflorum</i>
Pennycress, field	<i>Thlaspi arvense</i>
Pepperweed, Virginia	<i>Lepidium virginicum</i>
Pigweed, prostrate	<i>Amaranthus, blitoides</i>
Pigweed, redroot	<i>Amaranthus retroflexus</i>

Common Name	Scientific Name
Pigweed, smooth	<i>Amaranthus hybridus</i>
Pigweed, tumble	<i>Amaranthus, albus</i>
Prickly sida (Teaweed)	<i>Sida spinosa</i>
Puncturevine	<i>Tribulus terrestris</i>
Purslane, common	<i>Portulaca oleracea</i>
Pusley, Florida	<i>Richardia scabra</i>
Ragweed, common	<i>Ambrosia artemisiifolia</i>
Ragweed, giant	<i>Ambrosia trifida</i>
Rocket, London	<i>Sisymbrium irio</i>
Sesbania, hemp	<i>Sesbania exaltata</i>
Shepherd's purse	<i>Capsella bursa-pastoris</i>
Sicklepod	<i>Senna obtusifolia</i>
Smartweed (lady's thumb)	<i>Polygonum persicaria</i>
Smartweed, Pennsylvania	<i>Polygonum pensylvanicum</i>
Sowthistle, annual	<i>Sonchus oleraceus</i>
Spanish needles	<i>Bidens bipinnata</i>
Spurge, prostrate	<i>Euphorbia humistrata</i>
Spurge, leafy	<i>Euphorbia esula</i>
Spurry, corn	<i>Spergula arvensis.</i>
Sunflower, common	<i>Helianthus annuus</i>
Thistle, Canada	<i>Cirsium arvense</i>
Thistle, Russian	<i>Salsola iberica</i>
Velvetleaf	<i>Abutilon theophrasti</i>
Waterhemp, common	<i>Amaranthus rudis</i>
Waterhemp, tall	<i>Amaranthus tuberculatus</i>

9.0 CROP USE DIRECTIONS

9.1 Cotton

9.1.1 Dicamba-Tolerant Cotton – Preplant, At-Planting, Preemergence or Postemergence (In-Crop) Application

Crop			
Dicamba-tolerant cotton			
Target Weeds	Rate (fl oz/A)	Application Timing	Use Directions
Weeds listed in Section 8.1 & 8.2	56.5	Preplant Application: Apply prior to planting crop. At-Planting and Preemergence Application Apply during planting or after planting but before crop emergence.	Use only in: AR, KS, LA, MS, NM, OK, TN (excluding Wilson County), TX (excluding Gaines County) and the Boot Heel of MO. Preplant applications are especially suitable for minimum tillage or no-tillage systems. For grass weed control apply before grass weeds emerge or after clean cultivation. For application at planting, apply behind the planter. For emerged broadleaf weeds apply as a broadcast spray to small weeds that are less than 4 inches in height.
		Postemergence (In-crop) Application In-crop applications can be made over-the-top of dicamba-tolerant cotton through 6-leaf cotton or within 60 days after planting, whichever comes first.	Use only in: AL, AR, AZ, FL (excluding Palm Beach County), GA, KS, LA, MO, MS, NC, NM, OK, SC, TN (excluding Wilson County), TX (excluding Gaines County), VA. Apply as a postemergence broadcast spray to small broadleaf weeds that are less than 4 inches in height. If at least ½ inch of rainfall does not occur within 10 days after application, cultivate shallowly.

		Sequentially: Preplant, At-Planting or Preemergence followed by Postemergence (In-crop) Application on dicamba- tolerant cotton.	<p>Crop canopy interference can reduce spray coverage on target weeds and soil, and hinder weed control. Use higher spray volumes (greater than 15 gallons per acre) under these conditions.</p> <p>For grass weed control, apply before grass weeds emerge or after clean cultivation.</p> <p>An integrated program using preemergence residual herbicides such as Caparol® 4L, followed by a postemergence application of A21472 Plus VaporGrip Technology will provide optimal weed control.</p>
Tank-Mix Options: <ul style="list-style-type: none"> Refer to Section 9.1.2 for tank-mix options and spray additives with A21472 Plus VaporGrip Technology. 			
Resistance Management: <ul style="list-style-type: none"> Refer to Section 3.1 			
Precautions: <ul style="list-style-type: none"> For preplant application, to the extent possible, avoid moving treated soil out of the row or move untreated soil to the surface during planting, or weed control will be diminished. If heavy rainfall occurs soon after application, crop injury may occur. Injury will be more severe in poorly drained areas where water stands for several hours or days, or where the seeding slit has not been properly closed. 			
USE RESTRICTIONS			
<ol style="list-style-type: none"> Refer to Section 7.1 for additional product use restrictions. Maximum Single Application Rate: 56.5 fl oz/A (equivalent to 0.5 lb dicamba ae/A and 1.0 lb S-metolachlor/A) Maximum Annual Rate: 113 fl oz/A/year <ol style="list-style-type: none"> DO NOT exceed 1.9 lb ai/A/year of S-metolachlor-containing products on coarse-textured soils. DO NOT exceed 2.48 lb ai/A/year of S-metolachlor-containing products on medium- or fine-textured soils. DO NOT exceed 2.0 lb ae/A/year of dicamba-containing products. DO NOT apply less than 56.5 fl oz of this product/A (equivalent to 0.5 lb dicamba ae/A and 1.0 lb S-metolachlor/A). DO NOT make more than one preplant or at-planting or preemergence application, and/or one postemergence (In-crop) application on medium-or fine-textured soils. DO NOT make more than one application on coarse-textured soils. DO NOT use on sand or loamy sand soils. DO NOT use on Taloka silt loam. DO NOT use where water is likely to "pond" over the bed. DO NOT apply to non-dicamba-tolerant cotton. DO NOT incorporate A21472 Plus VaporGrip Technology if applied prior to planting, or crop injury may result. DO NOT use in Gaines County, TX; Wilson County, TN; or Palm Beach County, FL. DO NOT graze or feed treated forage or fodder to livestock. Pre-harvest Interval (PHI): 100 days 			

9.1.2 Tank-Mix Combinations for Dicamba-Tolerant Cotton

Application	Tank-Mix Brands	Use Directions
Preplant At-planting Preemergence Postemergence	A21472 Plus VaporGrip Technology may only be tank mixed with products that have been tested and found not to adversely affect the spray drift properties of A21472 Plus VaporGrip Technology. A list of those approved tank-mix products may be found at the following website: www.TaviumTankMix.com .	<p>Apply as directed according to this label and the labels of tank-mix partners.</p> <p>Spray Additives: Although not required, spray additives may be added to improve control of emerged weeds according to the guidance below:</p> <p>In all applications with additives, A21472 Plus VaporGrip Technology may only be tank mixed with additives that have been tested and found not to adversely affect the spray drift properties of A21472 Plus VaporGrip Technology. A list of those approved tank-mix additives may be found at the following website: www.TaviumTankMix.com.</p> <p><u>For preplant, at-planting and preemergence applications,</u> the following additives may be used:</p> <p><u>Nonionic Surfactant (NIS)</u> - Use NIS containing at least 80% active ingredient at 0.25% v/v (1 qt/100 gal) of the finished spray volume.</p> <p><u>Crop Oil Concentrate (COC) or Methylated Seed Oil (MSO)</u> – Use a nonphytotoxic COC or MSO containing 15–20% approved emulsifier at 0.5–1.0% v/v (2-4 qt/100 gal) of the finished spray volume.</p> <p><u>For postemergence applications,</u> use of a Nonionic Surfactant (NIS) additive described above is allowed.</p> <p>Use of a Crop Oil Concentrate (COC) or Methylated Seed Oil (MSO) for postemergence applications is not advised due to the potential for crop injury.</p>
<p>Precautions:</p> <ul style="list-style-type: none"> • Drift reduction agents that are on the approved tank-mix website may be used. Drift reduction agents can reduce the percentage of driftable fines. Ensure that the drift reduction agent is effective with the spray nozzle and spray pressure set-up. • The addition of spray additives to over-the-top applications in dicamba-tolerant cotton may cause some leaf spotting/necrosis. Cotton will fully recover from these transient effects and develop normally. 		

TANK-MIX USE RESTRICTIONS

1. All use restrictions cited in **Section 9.1.1** apply to tank-mixes with A21472 Plus VaporGrip Technology.
2. For all tank mixtures, refer to individual product labels for precautionary statements, restrictions, rates, approved uses, rotational restrictions and a list of weeds controlled. Follow the most restrictive label.
3. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
4. **DO NOT** tank mix products containing ammonium salts such as ammonium sulfate and urea ammonium nitrate.

9.2 Soybean

9.2.1 Dicamba-Tolerant Soybeans – Preplant, At-Planting, Preemergence or Postemergence (In-Crop) Application

Crop			
Dicamba-tolerant soybeans			
Target Weed	Rate (fl oz/A)	Application Timing	Use Directions
Weeds listed in Section 8.1 & 8.2	56.5	Preplant Application: Apply prior to planting crop.	For use only in States specified in Section 7.1 . This product must not be used in a county that has been explicitly prohibited on this label.
		At-Planting and Preemergence Application: Apply during planting or after planting but before crop emergence.	<u>For Preplant, At-Planting or Preemergence applications:</u>
		Postemergence (In-crop) Application In-crop applications can be made over-the-top of dicamba-tolerant soybeans through V4 soybeans or within 45 days after planting, whichever comes first. No applications can be made to double crop soybeans.	Preplant applications are especially suitable for minimum tillage or no-tillage systems. For application at planting or preemergence, apply behind the planter. For grass weed control, apply before grass weeds emerge or after clean cultivation.
		Sequentially: Preplant, At-Planting or Preemergence followed by Postemergence (In-crop) application on dicamba-tolerant soybeans.	For emerged broadleaf weeds, apply as a broadcast spray to small weeds that are less than 4 inches in height. <u>For Postemergence Applications:</u> For emerged broadleaf weeds, apply as a broadcast spray to small weeds that are less than 4 inches in height. For grass weed control, apply before grass weeds emerge. Crop canopy interference can reduce spray coverage on target weeds and

		<p>soil, and hinder weed control. Use higher spray volumes (greater than 15 gallons per acre) under these conditions.</p> <p>An integrated program using preemergence residual herbicides such as Boundary®, Prefix® Herbicide or BroadAxe® XC Herbicide, followed by a postemergence application of A21472 Plus VaporGrip Technology will provide optimal weed control.</p> <p>Dicamba-tolerant soybeans may exhibit leaf drooping following postemergence application. This response is transient and the soybeans will fully recover.</p>
Tank-mix Options: <ul style="list-style-type: none"> Refer to Section 9.2.2 for tank-mix options and spray additives with A21472 Plus VaporGrip Technology. 		
Resistance Management: <ul style="list-style-type: none"> Refer to Section 3.1 		
USE RESTRICTIONS		
<ol style="list-style-type: none"> Refer to Section 7.1 for additional product use restrictions. Maximum Single Application Rate: 56.5 fl oz/A (equivalent to 0.5 lb dicamba ae/A and 1.0 lb S-metolachlor/A) Maximum Annual Rate: 113 fl oz/A/year <ol style="list-style-type: none"> DO NOT exceed 2.48 lb ai/A/year of S-metolachlor-containing products. DO NOT exceed 2.0 lb ae/A/year of dicamba-containing products. DO NOT apply less than 56.5 fl oz of this product/A (equivalent to 0.5 lb dicamba ae/A and 1.0 lb S-metolachlor/A). DO NOT make more than one preplant or at-planting or preemergence application, and/or one postemergence (In-crop) application. Only make applications to soybeans that contain the dicamba-tolerant trait. DO NOT feed treated forage or hay to livestock for 30 days following a preplant, at-planting, or preemergence application. DO NOT graze or feed treated forage or hay to livestock following a postemergence application. Pre-harvest Interval (PHI): 90 days 		

9.2.2 Tank-Mix Combinations for Dicamba-Tolerant Soybeans

Application	Tank-Mix Brands	Use Directions
Preplant At-planting Preemergence Postemergence	<p>A21472 Plus VaporGrip Technology may only be tank mixed with products that have been tested and found not to adversely affect the spray drift properties of A21472 Plus VaporGrip Technology. A list of those approved tank-mix products may be found at the following website: www.TaviumTankMix.com.</p>	<p>Apply as directed according to this label and the labels of tank-mix partners.</p> <p>Spray Additives: Although not required, spray additives may be added to improve control of emerged weeds according to the guidance below:</p> <p>In all applications with additives, A21472 Plus VaporGrip Technology</p>

		<p>may only be tank mixed with additives that have been tested and found not to adversely affect the spray drift properties of A21472 Plus VaporGrip Technology. A list of those approved tank-mix additives may be found at the following website: www.TaviumTankMix.com.</p> <p><u>For preplant, at-planting and preemergence applications,</u> the following additives may be used:</p> <p><u>Nonionic Surfactant (NIS)</u> - Use NIS containing at least 80% active ingredient at 0.25% v/v (1 qt/100 gal) of the finished spray volume.</p> <p><u>Crop Oil Concentrate (COC) or Methylated Seed Oil (MSO)</u> – Use a nonphytotoxic COC or MSO containing 15–20% approved emulsifier at 0.5–1.0% v/v (2-4 qt/100 gal) of the finished spray volume.</p> <p><u>For postemergence applications,</u> use of a Nonionic Surfactant (NIS) additive described above is allowed.</p> <p>Use of a Crop Oil Concentrate (COC) or Methylated Seed Oil (MSO) for postemergence applications is not advised due to the potential of crop injury.</p>
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Precautions:

- Drift reduction agents that are on the approved tank-mix website may be used. Drift reduction agents can reduce the percentage of driftable fines. Ensure that the drift reduction agent is effective with the spray nozzle and spray pressure set-up.
- The addition of spray additives to over-the-crop applications in dicamba-tolerant soybeans may cause some leaf spotting/necrosis. Soybeans will fully recover from these transient effects and develop normally.

TANK-MIX USE RESTRICTIONS

1. All use restrictions cited in **Section 9.2.1** apply to tank-mixes with A21472 Plus VaporGrip Technology.
2. For all tank mixtures, refer to individual product labels for precautionary statements, restrictions, rates, approved uses, rotational restrictions and a list of weeds controlled. Follow the most restrictive label.
3. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.
4. **DO NOT** tank mix products containing ammonium salts such as ammonium sulfate and urea ammonium nitrate.

9.2.3 Non-Dicamba-Tolerant Soybeans – Preplant Application

Crop			
Non-dicamba-tolerant soybeans			
Target Weed	Rate (fl oz/A)	Application Timing	Use Directions
Weeds listed in Section 8.1 & 8.2	56.5	Preplant Application: Apply prior to planting crop.	<p>Following a preplant application and a minimum accumulation of one inch of rainfall or overhead irrigation, a waiting period of 28 days is required before planting non-dicamba-tolerant soybeans, or crop injury may occur.</p> <p>Preplant applications are especially suitable for minimum tillage or no-tillage systems.</p> <p>For grass weed control, apply before grass weeds emerge or after clean cultivation.</p> <p>For emerged broadleaf weeds, apply as a broadcast spray to small weeds that are less than 4 inches in height.</p>
Tank-mix Options: <ul style="list-style-type: none"> Refer to Section 9.2.4 for tank-mix options and spray additives with A21472 Plus VaporGrip Technology. 			
Resistance Management <ul style="list-style-type: none"> Refer to Section 3.1 			
USE RESTRICTIONS			
<ol style="list-style-type: none"> Refer to Section 7.1 for additional product use restrictions. Maximum Single Application Rate: 56.5 fl oz/A (equivalent to 0.5 lb dicamba ae/A and 1.0 lb S-metolachlor/A) Maximum Annual Rate: 56.5 fl oz/A/year <ol style="list-style-type: none"> DO NOT exceed 2.48 lb ai/A/year of S-metolachlor-containing products. DO NOT exceed 2.0 lb ae/A/year of dicamba-containing products. DO NOT apply less than 56.5 fl oz of this product/A (equivalent to 0.5 lb dicamba ae/A and 1.0 lb S-metolachlor/A). DO NOT make more than one preplant application. DO NOT feed treated forage or hay to livestock for 30 days following a preplant application. Pre-harvest Interval (PHI): 90 days 			

9.2.4 Tank-Mix Combinations for Non-Dicamba-Tolerant Soybeans

Application	Tank-Mix Brands	Use Directions
Preplant	A21472 Plus VaporGrip Technology may only be tank mixed with products that have been tested and found not to adversely affect the spray drift properties of A21472 Plus VaporGrip Technology. A list of those approved tank-mix products may be found at the following website: www.TaviumTankMix.com .	<p>Apply as directed according to this label and the labels of tank-mix partners.</p> <p>Spray Additives: Although not required, one of the following spray additives may be added to improve control of emerged broadleaf weeds:</p>

		<p>Nonionic Surfactant (NIS) - Use NIS containing at least 80% active ingredient at 0.25% v/v (1 qt/100 gal) of the finished spray volume.</p> <p><u>Crop Oil Concentrate (COC) or Methylated Seed Oil (MSO)</u> – Use a nonphytotoxic COC or MSO containing 15–20% approved emulsifier at 0.5–1.0% v/v (2–4 qt/100 gal) of the finished spray volume.</p>
<p>Precaution:</p> <ul style="list-style-type: none"> Drift reduction agents that are on the approved tank-mix website may be used. Drift reduction agents can reduce the percentage of driftable fines. Ensure that the drift reduction agent is effective with the spray nozzle and spray pressure set-up. 		
<p>TANK-MIX USE RESTRICTIONS</p>		
<ol style="list-style-type: none"> All use restrictions cited in Section 9.2.3 apply to tank-mixes with A21472 Plus VaporGrip Technology. For all tank mixtures, refer to individual product labels for precautionary statements, restrictions, rates, approved uses, rotational restrictions and a list of weeds controlled. Follow the most restrictive label. It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture. DO NOT tank mix products containing ammonium salts such as ammonium sulfate and urea ammonium nitrate. 		

10.0 STORAGE AND DISPOSAL

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage

Keep container closed to prevent spills and contamination.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

Container Handling (less than or equal to 5 gallons)

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling (greater than 5 gallons)

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the person refilling. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

Container Handling (greater than 5 gallons)

Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures approved by state and local authorities.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

11.0 CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent permitted by applicable law, Buyer and User agree to hold Syngenta and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent permitted by applicable law: (1) this warranty does not extend to the use of this product contrary to label instructions, or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and (2) Buyer and User assume the risk of any such use. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.**

To the extent permitted by applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

12.0 APPENDIX [Optional Text]

12.1 A21472 Plus VaporGrip Technology Use Summary Table [Optional Text]

[Start of Optional Text]

IMPORTANT: The table below is a summary of the Crop Use Directions for A21472 Plus VaporGrip Technology. However, it is important for the user to read and follow the complete instructions contained within this label.

Crop or Crop Group or Subgroup with examples	Maximum A21472 Plus VaporGrip Technology Rate per Application (fl oz/A)	Minimum Application Interval (days)	Pre-Harvest Interval (PHI days)	Maximum A21472 Plus VaporGrip Technology Rate per Year (fl oz/A)
Dicamba-Tolerant Cotton	56.5 ¹	NA	100	113 ²
Dicamba-Tolerant Soybeans	56.5 ¹	NA	90	113 ²
Non-Dicamba-Tolerant Soybeans	56.5 ¹	NA	90	56.5 ¹

¹ 56.5 fl oz/A is equivalent to 0.5 lb dicamba ae/A and 1.0 lb S-metolachlor/A

² 113 fl oz/A is equivalent to 1 lb dicamba ae/A and 2.0 lb S-metolachlor/A

[End of Optional Text]

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For non-emergency (e.g., current product information), call
Syngenta Crop Protection at 1-800-334-9481.

Manufactured for:
Syngenta Crop Protection, LLC

P.O. Box 18300
Greensboro, North Carolina, 27419-8300

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